SUCCESS STORY Every Drop Counts

Pipe detectors and leak detectors help Kara-Balta water utility to collect debts and reduce costs.



Foreman Yuri Rudaev and Water Technician Anatoly Snegir of Kara-Balta water utility test the leak detector.

Photo: Urban Institute

USAID project helps Kyrgyz water utilities to improve services for their customers and motivate users to pay water bills. Management and staff at the Kara-Balta water utility jumped at the chance to use a leak detector, pipe detector and Global Positioning System (GPS) provided by the USAID Decentralization and Local Government Program. As is the case with other such organizations across Kyrgyzstan, the Kara-Balta water utility does not know the exact location of each water pipe in the system. This prevents them from finding the exact location of water leaks and makes their repair an extremely difficult endeavor.

"In two hours, we learned how the equipment works" - explained water technician Igor Shevchenko who was showed by the USAID program how to use the detector. "They are very easy to use but so valuable! In order to find a pipe we would dig at random, and at times with no result. At one household we could waste the whole day, but with this equipment we save time and money," said Shevchenko. "If, for example, without the equipment it costs 1,000 Som, then with the equipment it costs a third or half that much."

During one month the utility located 21 km of pipes and 28 water leaks. Fifteen leaks were patched; the remaining thirteen leaks were illegal connections and therefore cut off. The equipment also helped locate leaks in the heating systems of two local schools.

When residents were informed how the equipment could locate the pipes connecting to each house, they were concerned that if they did not pay outstanding bills, their service might be cut off. Right away, the utility was able to reduce its arrears significantly. With fewer leaks, operating costs were reduced and water pressure increased.

The USAID Decentralization and Local Government Program endeavors to strengthen the skills of local government officials and staff so they can deliver better services to their citizens.

With the project support, seven water utilities have utilized the leak detection, pipe detection, and GPS equipment so far and seven more cities are in line to use the equipment this year. All of the water utilities that have used the equipment agree it helps them tremendously in improving their operations by reducing costs as well as – surprisingly – increasing revenues.